## ABSTRACT OF THE DISCLOSURE

A voltage offset compensating device of a CDMA (Code Division Multiple Access) communication system transmitter is provided which is capable of compensating voltage offset by measuring real voltage of channels at a CDMA communication system transmitter and compensating for a voltage offset with a feedback loop. The voltage offset compensating device of the CDMA communication system transmitter includes a codec unit that converts a signal received from a microphone into a digital signal, a modem unit that converts the signal received from the codec unit into a digital signal adaptable to the CDMA method of communication by compensating voltage offset of the signal, and a BBA (Base Band Analog) unit that converts the digital signal received from the modem unit into an analog signal. The amount of voltage offset is detected by a voltage measuring unit which measures the voltage value of each channel of the BBA unit in accordance with a control signal of the modem unit, and creates a gidital signal in accordance with the voltage offset which is fed back to the modem unit to effect any necessary voltage offset compensation.